



ELEKTRA M

DATASHEET | SPECIFICATIONS



TECHNICAL SPECIFICATIONS

ELECTRICAL PARAMETERS	
Light source	» LED
AC voltage	» AC 220–240 V / 50–60 Hz
Connection	» leading out cable » leading out cable with connector (G) » without cable (WO)
Driver	» electronic driver with surge protection L/N-Ground 10 kV
Surge protection	» additional surge protection 10 kV (S)
Fuse	» fuse 6,3 A (J)
Dimming	» non-dimmable (not labeled) » DALI (DALI) » night dimming (A) » preparation for wireless communication NEMA (N) » Zhaga (Z) or 2x Zhaga (Z2)
Constant lumen output	» CLO (C)
LIGHT PARAMETERS	
Optical system	» roads (Mxx) » roads (Lxx) » directional (Pxx) » area (Uxx) » pedestrian crossing (ZLx/ZPx) » AMBER module (Nxx) » AMBER optics (ALxx) » combined optics (Kxx) » BACK Light mask (BM2)
Light distribution	» direct
Color rendering index	» Ra > 70 » Ra > 80
Color temperature	» AMBER » 2 200 K » 2 700 K » 3 000 K » 4 000 K » 5 000 K » TW
Service life	» > 120 000 hrs. (L90)
CONSTRUCTION	
Housing	» aluminum cast
Color	» RAL 7015/9006 » other RAL (on request)
Surface	» matte
Cover	» tempered glass
SAFETY	
Protection class	» I » II
Ambient operating temperature	» max. -40 / +55 °C
Ingress protection	» IP 66
Impact protection	» IK 09 » IK 10
EMC	» YES
Vibration test	» YES
Static load test	» YES
Corrosion test – Salty spray	» YES (1 500 hours)
Life test	» YES
Certification	» ENEC » ENEC+ » Zhaga-D4i » IDA Dark Sky Approved
CB mark	» YES
RoHS	» YES
REACH	» YES
MOUNTING	
Method	» pole or outrigger (48–60 mm) » adapter (60–76) (on request) » adjustable joint ± 20°
Recommended height	» up to 12 m

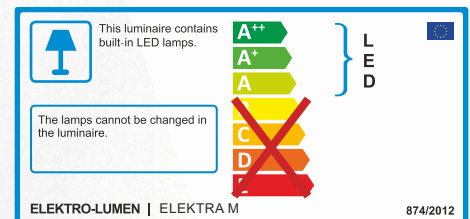
CHARACTERISTIC

Modern outdoor LED luminaire with integrated surge protection and adjustable joint ± 20°.

USE

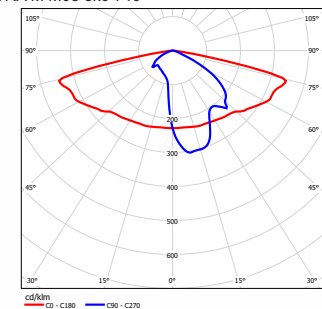
Road classes I., II. and III.

Outdoor areas



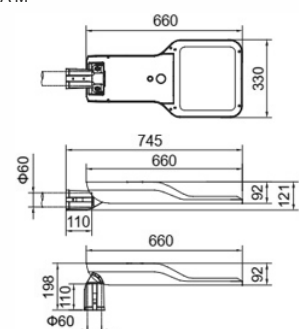
LIGHT DISTRIBUTION CURVE

ELEKTRA M M03 8k0 740



DIMENSIONS

ELEKTRA M



VARIANTS

DATASHEET ELEKTRA M

VARIANTS (chip 3535)	AMBER module (Nxx)			WARM WHITE 722			WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740			Luminaire efficiency (lm/W)	WEIGHT
	Name	Power consumption (W)	Světelný tok svítidla (lm)		Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)		
min			max	min		max	min		max	min		max	min		max		
ELEKTRA M Mxx 7k0	75,6	5 856	6 479	54,4	6 110	6 642	47	6 008	6 531	42	5 841	6 350	41,2	6 102	6 633	161	7,9
ELEKTRA M Mxx 8k0	89,4	6 693	7 405	62,3	6 967	7 574	54,3	6 856	7 453	49,3	6 736	7 322	47	6 865	7 462	159	7,9
ELEKTRA M Mxx 9k0	93,4	7 529	8 330	74	7 704	8 375	62,3	7 953	8 645	59,3	7 936	8 627	54,4	7 824	8 506	156	7,9
ELEKTRA M Mxx 10k0	107*	8 366	9 256	72,4	8 433	9 167	69,9	8 501	9 241	64,9	8 536	9 279	61	8 604	9 353	153	7,9
ELEKTRA M Mxx 12k0	135*	10 039	11 107	91,6	10 198	11 086	79,7	10 284	11 179	72,4	10 113	10 993	68,9	10 293	11 189	162	7,9
ELEKTRA M Mxx 14k0	152*	11 712	12 958	101,8	11 929	12 968	94,8	11 938	12 977	87,5	11 904	12 940	80,2	11 741	12 763	159	7,9
ELEKTRA M Mxx 15k0	—	—	—	—	—	—	101,7	12 761	13 872	94,4	12 795	13 909	88,8	12 898	14 021	158	7,9
ELEKTRA M Mxx 16k0	—	—	—	—	—	—	101,8	13 386	14 552	101,7	13 695	14 887	95	13 678	14 868	157	7,9
ELEKTRA M Mxx 17k0	—	—	—	—	—	—	—	—	—	101,8	14 312	15 558	101,7	14 638	15 912	156	7,9
ELEKTRA M Mxx 18k0	—	—	—	—	—	—	—	—	—	—	—	—	101,8	15 272	16 601	163	7,9
VARIANTS (chip 5050)	AMBER optics (Alxx)			WARM WHITE 722			WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740				
ELEKTRA M Lxx 7k0	36,9	4 853	5 329	—	—	—	41,3	6 179	6 448	39,6	6 223	6 494	36,9	6 205	6 475	175	7,9
ELEKTRA M Lxx 8k0	44	5 771	6 336	—	—	—	46,4	6 988	7 292	46,4	7 325	7 644	44	7 379	7 700	175	7,9
ELEKTRA M Lxx 9k0	48,7	6 376	7 000	—	—	—	53,7	8 019	8 368	51,2	8 045	8 396	48,7	8 152	8 507	175	7,9
ELEKTRA M Lxx 10k0	53,5	6 967	7 649	—	—	—	59,5	8 828	9 212	58,5	9 103	9 500	53,5	8 908	9 296	174	7,9
ELEKTRA M Lxx 12k0	65,2	8 316	9 130	—	—	—	73,6	10 659	11 123	68,7	10 490	10 947	65,2	10 632	11 095	170	7,9
ELEKTRA M Lxx 14k0	72,4	9 567	10 504	—	—	—	79,7	12 028	12 552	79,7	12 597	13 146	72,4	12 233	12 765	176	7,9
ELEKTRA M Lxx 15k0	79,7	10 457	11 482	—	—	—	88,5	13 246	13 823	87	13 655	14 249	79,7	13 371	13 953	175	7,9
ELEKTRA M Lxx 18k0	97,1	12 474	13 695	—	—	—	—	—	—	102,1*	15 735	16 420	97,1	15 949	16 643	171	7,9
TRANSITION LUMINAIRES				POWER (W)				TYPICAL LUMINOUS FLUX (lm)				EFFICIENCY LUMINAIRE		SERVICE LIFE			
Name				Color temperature (K)													
Ra 70				4 000 (B124)		5 000 (T3Q51)		min		max		lm/W		L90B10 (hrs.)		Kilogram*	
ELEKTRA M ZP01 6k0 740 B141/T3Q51				33,9		33,9	5 412		5 412	160			> 100 000		7,9		
ELEKTRA M ZP01 9k0 740 B141/T3Q51				51,5		51,5	8 239		8 239	160			> 100 000		7,9		
ELEKTRA M ZP01 12k0 740 B141/T3Q51				68,9		68,9	10 779		10 779	156			> 100 000		7,9		
ELEKTRA M ZP01 15k0 740 B141/T3Q51				88,8		88,8	13 507		13 507	152			> 100 000		7,9		
ELEKTRA M ZP02 6k0 740 B141/T3Q51				33,9		33,9	5 413		5 413	160			> 100 000		7,9		
ELEKTRA M ZP02 9k0 740 B141/T3Q51				51,5		51,5	8 242		8 242	160			> 100 000		7,9		
ELEKTRA M ZP02 12k0 740 B141/T3Q51				68,9		68,9	10 782		10 782	156			> 100 000		7,9		
ELEKTRA M ZP02 15k0 740 B141/T3Q51				88,8		88,8	13 512		13 512	152			> 100 000		7,9		
ELEKTRA M ZP03 6k0 740 B141/T3Q51				33,9		33,9	5 387		5 387	159			> 100 000		7,9		
ELEKTRA M ZP03 9k0 740 B141/T3Q51				51,5		51,5	8 201		8 201	159			> 100 000		7,9		
ELEKTRA M ZP03 12k0 740 B141/T3Q51				68,9		68,9	10 730		10 730	156			> 100 000		7,9		
ELEKTRA M ZP03 15k0 740 B141/T3Q51				88,8		88,8	13 446		13 446	151			> 100 000		7,9		
ELEKTRA M ZP06 6k0 740 B141/T3Q51				33,9		33,9	5 260		5 260	155			> 100 000		7,9		
ELEKTRA M ZP06 9k0 740 B141/T3Q51				51,5		51,5	8 008		8 008	155			> 100 000		7,9		
ELEKTRA M ZP06 12k0 740 B141/T3Q51				68,9		68,9	10 476		10 476	152			> 100 000		7,9		
ELEKTRA M ZP06 15k0 740 B141/T3Q51				88,8		88,8	13 128		13 128	148			> 100 000		7,9		
ELEKTRA M ZL04 6k0 740 B141/T3Q51				33,9		33,9	5 334		5 334	157			> 100 000		7,9		
ELEKTRA M ZL04 9k0 740 B141/T3Q51				51,5		51,5	8 120		8 120	158			> 100 000		7,9		
ELEKTRA M ZL04 12k0 740 B141/T3Q51				68,9		68,9	10 623		10 623	154			> 100 000		7,9		
ELEKTRA M ZL04 15k0 740 B141/T3Q51				88,8		88,8	13 312		13 312	150			> 100 000		7,9		
ELEKTRA M ZL06 6k0 740 B141/T3Q51				33,9		33,9	5 260		5 260	155			> 100 000		7,9		
ELEKTRA M ZL06 9k0 740 B141/T3Q51				51,5		51,5	8 008		8 008	155			> 100 000		7,9		
ELEKTRA M ZL06 12k0 740 B141/T3Q51				68,9		68,9	10 476		10 476	152			> 100 000		7,9		
ELEKTRA M ZL06 15k0 740 B141/T3Q51				88,8		88,8	13 128		13 128	148			> 100 000		7,9		

* Can not be produced under ENEC licence
** Weight may vary depending on the luminaire variant
Luminaire ambient temperature TQ 25 °C
Initial color consistency: ≤ 5 SDCM
IDA Dark Sky fixture seal of approval relates to $\leq 3\ 000$ K
To meet IDA requirements, the luminaires must be installed horizontally with the road
Optical and electrical parameters tolerance $\pm 10\%$

When using the CLO function, the initial power and luminous flux is 10 % lower than the value shown in the table. LDT curves with CLO function have the letter "C" at the end of their marking.

The term AMBER in lighting technology refers to light with a minimum amount of the blue part of the light spectrum.

AMBER module - the light emitted from the LED chips on the module is already free of the blue part of the light spectrum (standard PMMA optics).

AMBER optics - the optical system absorbs the blue part of light from the LED module and transmits the remaining light spectrum (special AMBER optics).

CODE DESCRIPTION

ELEKTRAM	II	M01	8k0	730	B124	45CAZ2	SJG	H3S	ENEC	
Name										
Class										
Without marking										Class I
II										Class II
Luminaire generation										
M01										Roads
L01										Roads
P01										Directional
U01										Area
ZP1/ZL1										Pedestrian crossings
K01										Combined optics
AL01										Communication, AMBER optics
N01										Communication, AMBER module
BM2										Back light mask
Luminous flux marking (source)										
Ra 70 / 3 000 K										
LED module marking										
B										TYP LED module
1										
2										
4										Mask type
Driver type										
43										OSRAM 4DIM (DALI) + 3 pole terminal block
45										OSRAM 4DIM (DALI) + 5 pole terminal block
45P										OSRAM 4DIM (DALI) + 5 pole terminal block + presence detection
4										OSRAM 4 DIM
1										OSRAM 1DIM (noDALI)
D										OSRAM DX – Dexal (for Zhaga connector)
C										Constant luminous flux (CLO)
A										AstroDim
Z										Zhaga konektor, 4 pin (Dexal driver)
Z2										2x Zhaga konektor, 4 pin (Dexal driver)
N										NEMA connector, 7 pin (4 DIM driver)
S										Surge protection
J										Fuse 6,3 A
G										Gesis connector
H										H05(07)RN-F cable (1 mm ²)
C										CYKY cable (1,5 mm ²)
WO										Without cable
2										2 core cable
3										3 core cable
5										5 core cable
S										Standard – 25 cm length of cable (led out of the luminaire)
1										1 meter (length in whole meters)
ENEC certification										